

Name:	Fundamentals of Fire Protection
Course Description:	Provides an overview to fire protection; career opportunities in fire protection and related fields; philosophy and history of fire protection/service; fire loss analysis; organization and function of public and private fire protection services; fire departments as part of local government; laws and regulations affecting the fire service, fire service nomenclature; specific fire protection functions; basic fire chemistry and physics; introduction to fire protection systems; introduction to fire strategy and tactics.
Prerequisite:	None
Outcomes:	<ol style="list-style-type: none"> 1. Describe and discuss the components of the history and philosophy of the modern day fire service. 2. Analyze the basic components of fire as a chemical reaction, the major phases of fire, and examine the main factors that influence fire spread and fire behavior. 3. Differentiate between fire service training and education; fire protection certificate program and a fire service degree program; and explain the value of education in the fire service. 4. List and describe the major organizations that provide emergency response service and illustrate how they interrelate. 5. Identify fire protection and emergency-service careers in both the public and in the private sector. 6. Synthesize the role of national, state and local support organizations in fire protection and emergency service. 7. Discuss and describe the scope, purpose, and organizational structure of fire and emergency service. 8. Describe the common types of fire and emergency service facilities, equipment, and apparatus. 9. Compare and contrast effective management concepts for various emergency situations. 10. Identify and explain the components of fire prevention including code enforcement, public information, and public and private fire protection systems.
References/Text:	<i>Introduction to Fire Protection</i> , Robert Klinoff, Delmar <i>Introduction to Fire Science</i> , Loren Bush, Glencoe <i>NFPA Handbook</i> (CDROM licensing agreement available) <i>Principles of Fire Protection</i> , Percy Bugbee & Arthur Cote, NFPA <i>Firefighters Handbook</i> , Delmar <i>Fire Service Orientation and Terminology</i> , IFSTA
Assessment:	Students will be evaluated for mastery of learning objectives by methods of evaluation to be determined by the instructor.
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Course Outline

Fundamentals of Fire Protection

- I. Careers in the Fire Protection/Emergency Services
 - A. Opportunities/ Private, Industrial, Local, Municipal, State and Federal
 - B. Pay, Hours of Duty, Benefits, Promotion and Retirement
 - C. Qualifications
 - Work Ethics and Human Relations
 - Education and Training
 - a. Certificates
 - b. Degrees
 - D. Selection Process
- II. History
 - A. Evolution of the Fire Protection
 - B. The US Fire Problem: Life and Property
- III.. Fire Prevention and Public Fire Education
 - A. Fire Investigation
 - B. Code Enforcement
 - C. Public Education
- IV. Scientific Terminology
 - A. Fire Behavior
 - B. Flammability and Characteristics of Solids, Liquids and Gases.
- V. Building Design and Construction
- VI. Fire Detection and Suppression Systems
- VII. The Role of Public and Private Support Organizations
 - A. Local
 - B. State
 - C. Federal and National
 - D. International
- VIII. Fire and Emergency Services Equipment and Facilities
- IX. Management
 - A. Emergency Operations
 - B. Organizational Structure of Fire and Emergency Services